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HOW CAN INDIA, WITH ITS VAST, LARGELY RURAL POPULATION, PROVIDE AFFORDABLE HEALTHCARE TO ITS PEOPLE

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Abstract

Public health in India remains a matter of grave concern, in terms of **public expenditures** on healthcare. The lack of adequately funded public health services pushes large number of people to incur heavy out of pocket expenditures on the services purchased from private sector. The aim of present study is to review the current scenario of healthcare services in India and government initiatives towards their solution. The results show that while the private sector can continue to operate for those who can afford it, an expansion of good quality affordable public sector care is essential. As supply in the public sector increases, it will cause a shift towards public sector providers freeing the vulnerable population from dependence on high cost and often unreachable private sector health care.

Keywords:

Public health;

Rural population;

Telemedicine;

Affordable healthcare

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1. Introduction

Affordability is a serious problem in healthcare for the vast majority of the population, especially in tertiary care. The remote villages in the country are still lacking chemist shops, despite the growth of medical tourism in India. In India, out of 121 crore population; 83.3 is rural and 37.7 is urban population including 6.54 crore slum population. Therefore, healthcare services remain prohibitively expensive for the wider masses. It is estimated that health expenditures are responsible for more than half of Indian households falling into poverty every year; the impact is estimated to have pushed around 39 million Indians into poverty.

1.1 Out of Pocket Expenditure

Public health in India remains a matter of grave concern, in terms of public expenditures on healthcare. The lack of adequately funded public health services pushes large number of people to incur heavy out of pocket expenditures on the services purchased from private sector. It arises even in the public sector hospitals, since lack of medicines means that patients have to buy them, resulting in high financial burden on families in case of severe illness. A large fraction of the out of pocket expenditure arises from outpatient care and purchase of medicines, which are mostly not covered even by the existing insurance schemes. The problem is particularly acute in India, where due to low government financing of health and inadequate protection of populations against healthcare costs, nearly 61.2% of these costs are borne by people out of their pockets, as compared to the global average of 20.5%. People from the lower socio-economic strata are disproportionately affected, and millions fall deeper into poverty or abstain from availing the health services they require.

1.2 Gross Domestic Product

The total expenditure on health care in India (both public and private together) is 4.1 % of GDP, which is broadly comparable to other developing countries at similar levels of per capita income. However, Public Expenditure on healthcare is only 1.97% of GDP as compared to 7.7% in USA. According to the World Health Statistics 2013, public expenditure on health is very low i.e 28.2 % of the total health expenditure. According to Government of India's 12th Five Year Plan, public health expenditure in India was only 1.04% of GDP in 2011–12, as compared to the global average of 5.4 %.

1.3 Health Insurance

In India, the percentage of population covered by health insurance is small. And the bulk of the population today relies upon the private sector health providers, paying amounts which they cannot afford, due to inadequate reach of the public sector. The public sector also funds a number of health insurance schemes, currently covering an estimated population of 24 crores through the Central Government Health Scheme (3 million), Employee State Insurance Scheme (60 million) and Rashtriya Swasthya Bima Yojana(150 million). In addition, 110 million people in the South Indian states including 5 million in Karnataka, 35 million in Tamil Nadu and 70 million in Andhra Pradesh receive coverage under state government funded health insurance schemes. Only 20-25% of India's population is covered under a public/private health insurance scheme. The public sector only provides an estimated 20% of outpatient and 40% of hospitalization services in India.

1.4 Public–Private Partnerships:

PPPs offer an opportunity to tap the human and managerial resources of the private sector for public good. But experience with PPP has shown that Government's capacity to negotiate and manage it is not effective. Without effective regulatory mechanisms, fulfilment of contractual obligations suffers from weak oversight and monitoring.

1.5 Other National Public Schemes:

Although the government has set up over 22,000 primary healthcare centers in rural India, these often remain just structures as doctors, radiographers, pathologists,etc, are hard to find, as they prefer to work in the larger cities where there are better facilities and remunerative jobs. Since the launch of the National Rural Health Mission in 2005 and the Rashtriya Swasthya Beema Yojana in 2008, the out of pocket expenditure on healthcare in India has been reduced but still remains one of the highest in the world.

2. Government Initiatives towards Solution

2.1 Rashtriya Swasthya Bima Yojana

RSBY was launched by Ministry of Labour and Employment, GoI in 2008 to provide health

insurance coverage for Below Poverty Line (BPL) families. The objective of RSBY is to provide protection to BPL households, and now extended to building & construction workers, MNREGA workers, street vendors, beedi workers and domestic workers; from the financial liabilities arising out of hospitalizations. This scheme has won plaudits from the UN, World Bank and ILO as one of the world's best health insurance schemes.

Key Features

- A cashless health insurance scheme targeted at BPL families and unorganized labour sector.
- Beneficiaries are entitled to hospitalization coverage up to Rs. 30,000/- for most of the diseases that require hospitalization.
- Coverage extends to 5 members of the family.
- Beneficiary has to pay a only Rs 30 per annum as Registration / renewal fee.

Financing

Being a centrally sponsored scheme, majority of the funding comes from central government, i.e. 75% of premium, while remaining 25% of premium is paid by state government (except north eastern states & Jammu & Kashmir, where number changes to 90% & 10%).

Performance:

Around 15 crores of people have been covered under the scheme, covering more than 18 lakh hospitalizations till date. More than 12000 hospitals (out of which 70% are private) have been empanelled under the scheme. It has resulted in improvement in the access to healthcare, bringing private investment in healthcare in rural areas.

Advantages:

It provides freedom of choice to BPL Policy holder to choose from hospitals. Every beneficiary family is provided a biometric enabled smart card that contains their photograph and fingerprint. All empanelled hospitals are IT enabled and connected at the district level. The use of the biometric card and a key management system makes it safe and foolproof. A beneficiary is able

to use smart card in any RSBY empanelled hospital across India, which is of great help to migrant workers. No payment is to be made by the beneficiary and participating providers may send online claims to the insurer and get paid electronically. A data management system is put in place that can track any transaction across India and can provide periodic analytical reports.

Challenges

The awareness about the scheme remains low at ground level, resulting in lesser hospitalization cases as compared to number of active smart cards. Although, there are 3.7 crore active cards as of now, only 18 lakh hospitalization cases were covered in 2012-13.The cap amount of Rs. 30,000 for a family is insufficient to cover tertiary care services and complicated medical cases. Another major challenge is that of "supplier-induced demand". Since upto Rs 30,000, the patient does not have to incur any out-of-pocket expenditure, so he/she is often induced by the service providers to undertake surgeries which are not necessary and would not otherwise be advisable. There have been cases of RSBY abuse to carry out hysterectomies.

2.2 Universal Health Coverage (UHC)

UHC has been defined by WHO as "ensuring that all people have access to needed promotive, preventive, curative and rehabilitative health services, of sufficient quality to be effective, while also ensuring that people do not suffer financial hardship when paying for these services"."UHC can be the model for the 21st century. It provides access to services, prevents against exclusion and protects people from financial risk. This will bring more than health – it will bring equity, and contribute to a life of dignity for all." Ban Ki-moon (UN Secretary–General)."UHC is the most powerful unifying single concept that public health has to offer, because you can realize the dream and the aspiration of health for every person irrespective of what class you belong to, whether you are a woman, or whether you are poor." Dr Margaret Chan (WHO Director–General).

A High Level Expert Group (HLEG) on UHC was constituted in October 2010 by Planning Commission of India to develop a framework for providing easily accessible and affordable healthcare to all Indians. It proposed that every citizen should be entitled to essential primary, secondary and tertiary health care services guaranteed by the Central government. The range of

essential health care services offered as a National Health Package (NHP) will cover all common conditions and health care interventions for reducing mortality and disability. The package of services covered under UHC will be made available through the public sector and contracted-in private facilities. Two different options emerged for the provision of services by the institutions participating in the UHC program:

(a) In the first, private providers opting for inclusion in the UHC system would have to ensure that at least 75% of out-patient care and 50% of in-patient services are offered to citizens under the NHP. For these services, they will be reimbursed at the standard rates and their activities would be regulated and monitored to ensure that services guaranteed under NHP are delivered cashless with equity and quality. For the remainder of the out-patient and in-patient coverage, service providers would be permitted to offer additional services over and beyond the NHP package, for which they can accept additional payments or through private insurance policies.

(b) The second option entails that hospitals participating in UHC would only provide the cashless services related to NHP and would not provide any other services that would require out of pocket payment or private insurance coverage.

There are strengths and limitations to each of these approaches. The first option would make it easier for the state and central governments to contract-in private service providers. There is, however, a concern that this could result in diversion of patients from the cashless NHP to the on-payment service provided by the same provider or differential quality of services provided to UHC beneficiaries and paying patients, which may compromise quality of care for the UHC patients. The second option avoids this pitfall but would render it difficult for many medical college hospitals, institutions of excellence (such as the All India Institute of Medical Sciences) and private hospitals which are accredited for post-graduate training by the National Board of Examinations to participate in the UHC system, because teaching and research at those levels would require them to go beyond the NHP package covered by UHC. Central and State governments may examine these options and choose, based on their assessment of how best the access and equity objectives of UHC can be served.Every citizen will be issued an IT-enabled National Health Entitlement Card (NHEC) to ensure cashless transactions, allow for mobility

across the country and contain personal health information. This card will also help in tracking patterns of disease burdens across the country and in planning better for the public provision of health care.

HLEG recommendations on UHC:

1. Government should increase public expenditure on health from the current level of 1.2 per cent of GDP to at least 2.5 per cent by the end of the Twelfth Plan, and to at least 3 per cent of GDP by 2022.
2. The technical and other capacities developed by the Ministry of Labour for the RSBY should be leveraged as the core of UHC operations—and transferred to the Ministry of Health and Family Welfare.
3. Price controls and price regulation, especially on essential drugs, should be enforced. The Essential Drugs List should be revised and expanded, and rational use of drugs ensured. Public sector should be strengthened to protect the capacity of domestic drug and vaccines industry to meet national needs.
4. National Council for Human Resources in Health (NCHRH) should be established.
5. A National Health Package should be developed that offers, as part of the entitlement of every citizen, essential health services at different levels of the healthcare delivery system. There should be equitable access to health facilities in urban areas by rationalising services and focusing particularly on the health needs of the urban poor.

The Twelfth Plan seeks work towards this long term objective of establishing a system of Universal Health Coverage (UHC) in the country. This means that each individual would have assured access to a defined essential range of medicines and treatment at an affordable price, which should be entirely free for a large percentage of the population.The 12th Five Year Plan commits to undertake upto three UHC pilots in each state, which will pave the way for scaling up of Universal Health Coverage across the country. These pilots need to be adequately funded and well planned with their performance measured against carefully selected and standardized indicators.

2.3 Access to Essential Medicines in All Public Facilities

The Pharmaceutical industry has evolved from Rs. 1500 crore in 1980 to around Rs. 1,19,000crore by 2012. Availability of essential medicines in public sector health facilities free of cost is critical to achieve affordable health care for the bulk of the population. This is the area which provides the fastest scope. The medicines are sold primarily as branded drugs, at disproportionately very high prices. According to a PHFI 2012 report, 80% of out-patient care and 60% of all in-hospital care occurs at private facilities in India and majority of households are exposed to a private-sector market to buy drugs. According to NSO estimates, upto 79% of health care expenses in rural areas are due to medicines. Hence, access to low-priced generic drugs is very critical in ensuring affordable health care.

JAN AUSHADHI-SCHEME

The scheme launched in 2008, envisages opening of dedicated outlets i.e. 'Jan Aushadhi stores' (JAS) selling high quality generic medicines (equivalent in potency and efficacy to the expensive branded drugs) at low prices. A sample comparison of prices:

Name of salt	Dosage with pack of 10 tablets	Price of branded drugs (Rs.)	Jan Aushadhi Prices (Rs)	Difference
Antibiotic: Ciprofloxacin	250 mg	54.79	12.89	4 times higher
Pain Killer:Diclofenac	100 mg	60.40	04.20	14 times higher
Common Cold:Cetrizine	10 mg	18.10	02.75	6 time higher
Fever:Paracetamol	500 mg	09.40	03.03	3 time higher
Pain & Fever: Nimesulide	100 mg	39.67	03.16	12 time higher

Key objectives

- To provide low priced quality medicines to all through dedicated stores.
- To reduce unit cost of treatment per person.
- To create awareness through education and publicity that high priced drug does not imply high efficacy and potency.
- To encourages doctors to prescribe generic medicines.

Features

- State Government will nominate agencies like Charitable Organizations, NGOs and public health societies like Red Cross Society, etc for the purpose of running JAS. State Government may also provide built up space for JAS at district hospitals. Also nominated agencies shall be provided an initial financial assistance of Rs.2.50 Lakh per store.
- Other NGOs/societies/trusts/institutions/unemployed pharmacists/others may also run JAS, but the financial assistance would be linked to sales, subject to a ceiling of Rs. 10,000 per month for a year.
- 361 drugs covering around all therapeutic categories would be made available.
- 'No stock out' position will be maintained through a comprehensive supply chain management.
- Sourcing of medicines shall be done by open public tender. Central Pharmaceuticals Suppliers would be preferred in sourcing.
- Quality of medicines will be ensured byquality checks from NABL accredited laboratories.
- Massive Publicity campaign shall be launched to promote low priced generic drugs.

Journey so far:

So far, 157 Jan Aushadhi Stores have been opened acroos the State of Punjab, Haryana, Odisha, Andhra Pradesh, Rajasthan, Delhi, Uttarakhand, West Bengal, Jammu& Kashmir, Himachal Pradesh, Jharkhand and the Ut of Chandigarh.

Challenges:

The order doesn't seem to take into account India's disease profile as it leaves out several drugs crucial for treating many common conditions. Only 18% of anti-diabetics, 19% of anti-TB medicines and 6% of the respiratory therapeutics segment are under price control. This is despite India being the diabetes and TB capital of the world, and facing high prevalence of asthma and chronic obstructive pulmonary disease.Even though individual drugs are covered under the order but their combinations are not. For example, individual anti-TB drugs are under price control but their combinations which outsell single ingredient preparations are not.

3. SUGGESTIONS / RECOMMENDATIONS

3.1 Telemedicine

While the private sector can continue to operate for those who can afford it, an expansion of good quality affordable public sector care is essential. As supply in the public sector increases, it will cause a shift towards public sector providers freeing the vulnerable population from dependence on high cost and often unreachable private sector health care.

Specialist	**India**		**USA**		USA vs India
	No. practicing	Per lakh pop	No. Practicing	Per Lakh Pop	Specialist Ratio
Cardiologist	5000	0.42	31500	10.50	25.2x
Dermatologist	7000	0.58	10000	3.33	5.7x
Radiologist	10000	0.83	25000	8.33	10.0x
Ophthalmologist	11000	0.92	19000	6.33	6.9x

The US is widely considered to have a shortage of specialists, as well as a shortage of primary care physicians in rural areas. It has suffered from such shortages for decades. By comparison, India has a super-shortage of specialists, with less than 1 specialist per lakh people.

Providing new means of affordable access is no small task. So how are the crores of Indians, who have no access to a specialist, going to get help in the next 10 years?

- Enter the new smart mobile platforms, which are soon going to be ubiquitous.63.5% HHs in Slums in India has Mobile. The cost of a basic Android smartphone is now Rs 2,500 and falling. In not too many years, it won't be possible to purchase a new mobile phone that isn't a smartphone. India has the cheapest mobile services on the planet. 3G is already available across much of India; there will continue to be a ferocious price war to capitalise on the 3G and 4G spectrum purchased by the mobile carriers.
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- This is all good news for consumers and health care providers. Why? Because, the combo of ubiquitous smartphones and 3G data creates a massive low-cost platform for delivering health care services–the foundation of Telemedicine.
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- Mobile platforms are changing the game for diagnostics, creating opportunities for Telemedicine. Here's the formula for the future of diagnostics by many specialists: Smartphones, tablets and laptops (bring your own) at health clinic. Connected non-invasive diagnostic devices capture diagnostic and patient info. Phones/tablets connect securely via 3G/4G data to cloud-based apps. Cloud services connect to a network of specialists using smartphones/tablets, ready to provide fast responses.

- Here are some of the diagnostic services ready for disruptive growth:

a. Ophthalmology: Eye screening for disease and refraction issues can now be done by a technician using new low-cost devices such as Forus' 3netra, routed via mobile networks to ophthalmologists working in their homes, in the back seat of a taxi, or waiting for a flight and diagnosed with a tap on their smartphone.

b. Radiology: CT scans, X-rays, ultrasounds can be captured by a technician. The remote radiologists can then view these images along with other relevant patient data wherever they are on their smartphones, tablets or laptops and provide diagnosis. Numerous companies provide this technology today in developed markets, and numerous startups are looking to create low-cost versions of the same in India.

c. Cardiac care: Today, ECG monitoring devices are primarily sold to health facilities that have a cardiologist in near proximity. If you could easily transmit an ECG image via a smartphone to a group of on-demand cardiologists, you could suddenly put ECG devices in a 100 more places.

d. Dermatology: 85% of skin issues can be fully diagnosed by a dermatologist with a photo taken by a smartphone. From the embarrassing STDs and acne to rashes that don't go away and other skin issues, there is a huge efficiency to the consumer and the doctor in managing the interactions through a mobile platform.

3.2 Best Practices:

To Build and adopt affordable health care delivery systems like Kerala, Tamil Nadu, Maharashtra and Mizoram in other states of the country, as they are proven examples to show that good governance and political will can deliver affordable healthcare to the majority.

- Kerala has launched a **Comprehensive Health Insurance Scheme (CHIS)** to cover non-RSBY beneficiaries. The families which are excluded from centre's BPL list but are there in state's BPL list are provided insurance cover. Additionally, Above Poverty Line families can also opt for this insurance by paying premium. All other features of this scheme like coverage are similar to RSBY.
- Tamil Nadu has launched the **Chief Minister's Comprehensive Health Insurance Scheme** to provide cashless medical and surgical treatment to families whose annual income is less than Rs. 72,000. The scheme provides a coverage up to Rs.1,00,000/- per family per year on a floater basis and up to Rs. 1,50,000 per family per year for certain specified ailments and procedures of critical nature.
- Himachal Pradesh, Mizoram and Meghalaya have **topped up the premium payments** to insurers under the RSBY to provide additional cover beyond the 30,000 cap set by the Centre. This has helped cover additional cases which were otherwise not under RSBY
- Tamil Nadu has demonstrated the success of such a model, wherein the **Tamil Nadu Medical Supply Corporation** (TNMSC) provides cheap drugs to 40% of the State's population. States should be encouraged to position Special Purpose Vehicles, like TNMSC for managing procurement and logistics for 'Free medicines for all' in public health facilities. Under this model, procurement of quality generic medicines is done in bulk directly from quality-certified manufacturers through a transparent bidding process. The supply of medicines is demand based instead of traditionally 'supply driven' system.
- Successful **community based monitoring and planning** that was implementedin13districts, 37 blocks and 150 PHCs and 680 villages across 13 districts of Maharashtra involving around 25 civil society organizations can be adapted to the rest of India for making health services accountable and responsible. It will generate health workers from within local communities (ASHAs, Health workers/assistants, Nurses and paramedical staff) with attractive salaries to ensure involvement, commitment and employment to rural population.
- **PPP Model**: Mobile Health Service in Sunderban, W. Bengal by Contracting

Arrangements between Government of West Bengal and Non-profit NGO Joint Venture to provide Mobile boat based health services and access to health services in remote areas; and many others.

- **Voucher System**: Voucher is document which can be exchanged for defined goods or medical services as a token of payment or "Tied cash (as opposed to liquid cash).Vouchers tie the receipt of cash to particular goods, provided by particular vendors, at particular times. Vouchers have numerous potential benefits such as freedom of choice, better targeting of vulnerable populations, improved quality and cost effectiveness of service delivery by provider competition. In the area of maternal healthcare services, vouchers present an excellent mechanism which overcomes the financial, knowledge and socio-cultural barriers that prevent women from seeking institutionalized health care.

a) Janani Suraksha Yojana (JSY): In India, conditional cash transfers are being used to incentivize and empower women to shift from home to institutional births in one of the largest cash transfer schemes of the world in terms of number of beneficiaries– JSY. Under this scheme, women in rural areas receive Rs 1400 and those in urban areas receive Rs 1000 for delivering at public hospitals or accredited private facilities. However, the scheme faces many challenges. Women complained that the cash benefits received are inadequate to cover the additional costs incurred on medicines, transportation and pregnancy complications. Moreover, systemic delays in disbursal of cash benefits and receiving lesser than the assigned cash transfer have been frequently reported (Government of India, 2011). The Voucher Scheme is designed to ensure availability of free transportation for institutional delivery, for the poor and vulnerable families registered under the JSY. Transportation (to the hospital for delivery and travelling back home) is covered under the scheme. The delivery transportation under the scheme is be undertaken by the ambulance operators contracted under the ambulance scheme under Public Private Partnerships (PPP) and other private ambulance operators. The use of vouchers paves the way for a cashless mechanism to deliver an entire package of RCH goods and services at public and private facilities. Vouchers are extensively used in the delivery of safe motherhood services across the globe and most of these schemes cover a well-defined set of goods and services including: a) Ante Natal Checkups (ANCs) with diagnostic tests; b) Iron and folic acid tablets and Tetanus Toxoid injection; c) Delivery services (normal, caesarian and complicated); d) Essential new born care with immunization; e) Post Natal Checkups (PNCs) which can include

pills, breast feeding and family planning counseling; and, f) Transport expenditure.

b) Sambhav: This voucher scheme is part of the Innovations in Family Planning Services (IFPS) Project managed by USAID and the Government of India. From 2006-2012, it enabled BPL families to receive family planning and reproductive health services in Uttar Pradesh, Uttarakhand, and Jharkhand.

c) Chiranjeevi Yojana: Piloted in Gujarat by the State Government in 2005, it seeks to promote institutional delivery and post natal care for BPL and adivasi women through the distribution of vouchers.

3.3 Other Recommendations to Ensure Access to Affordable Healthcare

- Connect & reach upto remote areas through existing systems, like Indian Postal services. Indian postal services are very efficient in reaching even the remote corners of the country. A PHC unit can be attached with each post office as connecting point for distribution of essential medicines (allopath and ayush) with first aid kits and a trained health personnel from the local community can be made in charge of the unit.
- Improve mechanisms to train and retain skilled health manpower by providing incentives to work in rural villages or by generating and training people from within the local community with better salaries, provision of accommodation and other good living amenities as in defense services. Providing regular employment with better salaries can ensure service delivery.
- To ensure Access to Affordable Essential Medicines, Jan Aushadhi Scheme should be expanded to all districts, Sub-Divisions and Blocks. Implement the sale of generic drugs as generics rather than branded drugs. Fix the prices based on domestic need rather than on market trend criteria to enable affordability of essential medicines. Increase National List of Essential Medicines (NLEM) to 500 medicines instead of 400 to cover medicines for rare conditions.
- Regulation of private health sector to deliver free or affordable healthcare services through following measures:

- No further expansion of private healthcare facilities unless it is regulated to meet public health needs.
- Formulating similar norms and standards for government and private hospitals.
- Stipulate uniform service charges in all private hospitals, clinics and dispensaries, diagnostics centres at par with public hospitals as mandatory requirement.

- Many private hospitals are bound to provide affordable services as per the stipulated law, as acquired free government land.
- Regulate unethical practices of branded drug promotions.
- Make accountable the professional medical associations like IMA, MCI etc for supporting, promoting any unethical practices in medicines/ vaccines for complementation of above objectives.

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